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A Few Facts About Toncan Iron
for
Architects and Engineers

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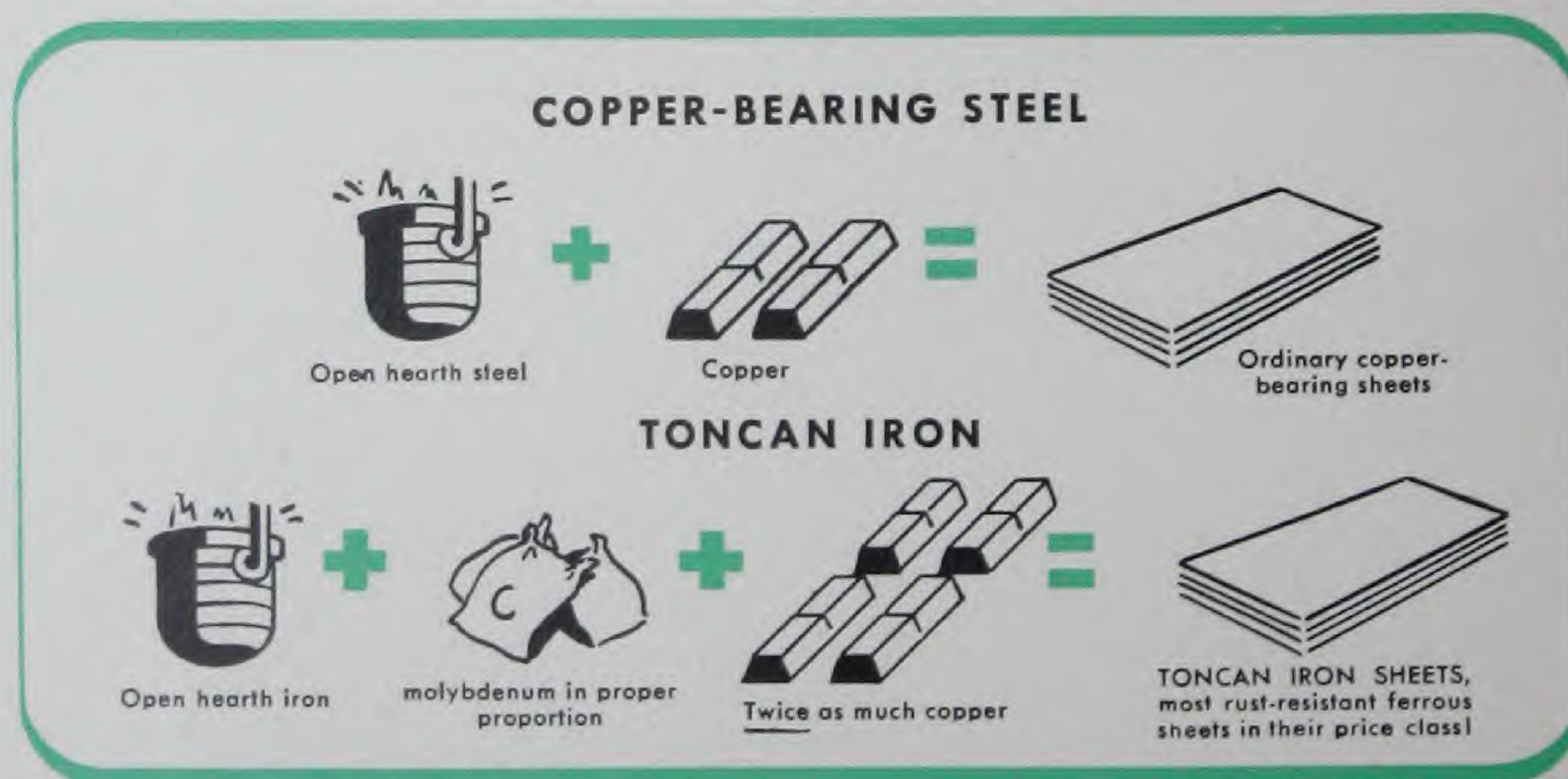
REPUBLIC STEEL CORPORATION • CLEVELAND, OHIO

What Is Toncan Iron ?

Toncan Iron is a highly refined open hearth iron of exceptional purity, with which *both* copper and molybdenum are alloyed in the proper proportion to provide maximum rust and corrosion-resistance. That copper increases corrosion-resistance of ferrous metals is a well established fact.

Toncan Iron contains *twice as much copper* as the best of competitive ferrous materials. This additional copper has maximum effectiveness because it is alloyed in correct proportion with molybdenum.

Toncan Iron is a rust-resistant metal which is structurally and chemically uniform. It is the same highly rust and corrosion resistant metal *all the way through*—not just on the surface.



Toncan Iron is *not* a steel. It is an *iron*. It is not merely a copper-bearing iron. *Toncan Iron is the only sheet metal on the market today which combines a refined open hearth iron with BOTH copper and molybdenum.* Because it contains *twice as much copper* as other ferrous materials in its price class, Toncan Iron lasts longer, costs less per year!

Why TONCAN IRON gives your clients more for their money

Toncan Copper Molybdenum Iron was created expressly to resist corrosion. Because of inherent chemical and structural differences from all other ferrous materials in its price class, Toncan Iron gives your clients more years of service at *lower cost per year!*

TONCAN IS AN IRON... with uniform rust-resistance

Iron and steel rust first and most rapidly at those points where there are chemical impurities or non-uniform grain structure. The more uniform the metal, chemically and physically, the more uniform is its resistance to corrosion.

Toncan Copper Molybdenum Iron is a highly refined open hearth iron from which rust-accelerating impurities have been removed to the proper limit. Republic's long experience makes it possible to produce commer-

cially pure open hearth iron of great *chemical uniformity*.

Skillful alloying of the correct proportion of copper and molybdenum with the uniformly pure iron creates a fine, equi-axed grain structure—*structural uniformity*.

Toncan Copper Molybdenum Iron—uniform both chemically and structurally — resists rust equally and uniformly *all the way through the metal*.

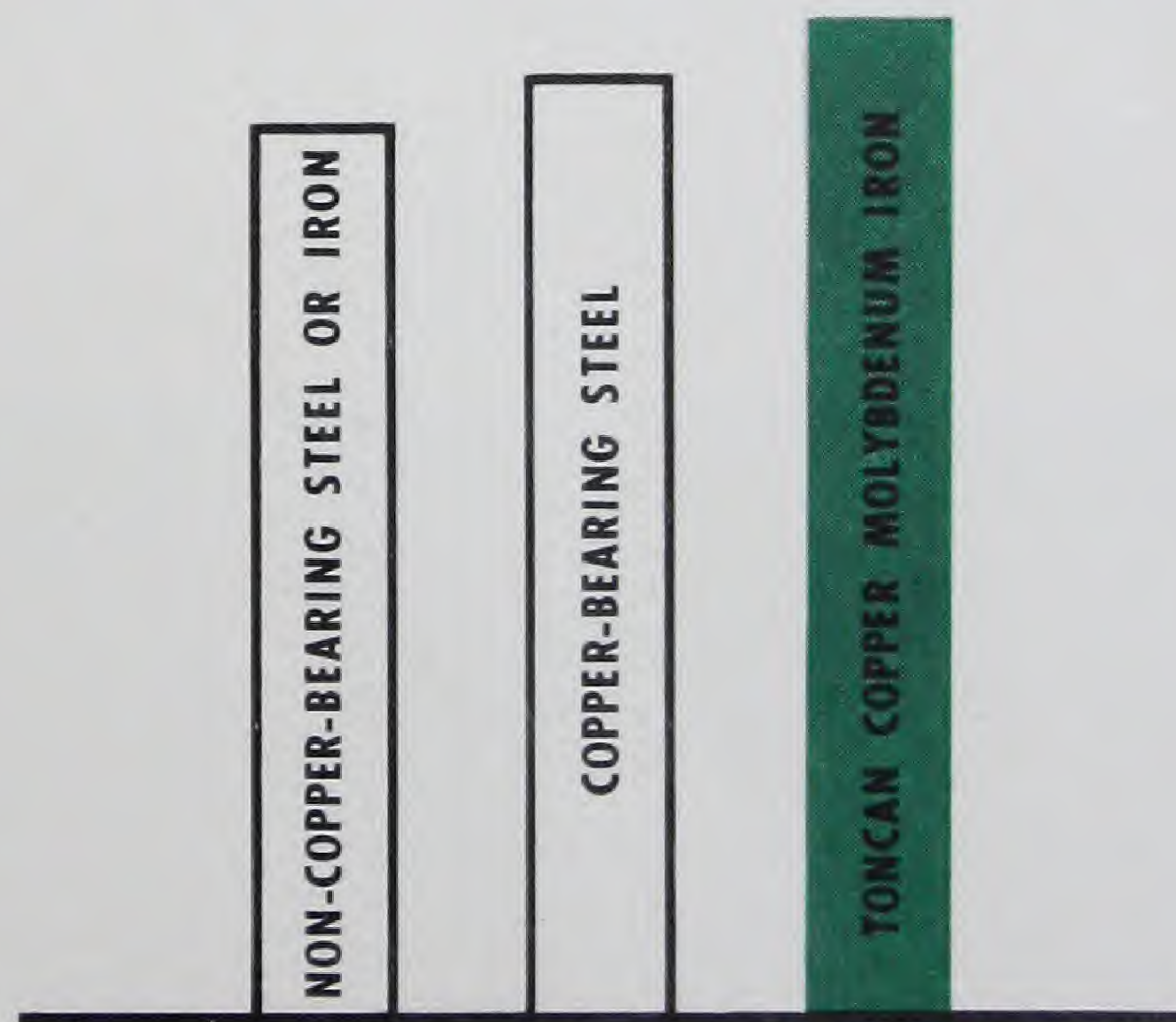
TONCAN IRON HAS GREATER "NOBILITY"... resists rust longer

Rust is iron oxide—iron combined with oxygen. Under 400° F., iron will not combine with oxygen (will not rust) until the iron has first been dissolved.

Some metals dissolve, or go into solution, easily. Others, because of their inherent nature, are more "noble," which means that they have greater resistance to solution. For instance: gold, silver and platinum, known as the "noble metals," are famous for their resistance to rust.

Toncan Copper Molybdenum Iron—because it contains *both* molybdenum and *twice as much copper* as competing copper-bearing irons and steels—has greater "nobility." Therefore it has greater resistance to rust and corrosion than any other ferrous material in its price class!

As a result of its greater "nobility," plus chemical and structural uniformity, Toncan Iron lasts longer on the job, gives your clients more for their money!



TONCAN IRON HAS GREATER RESISTANCE to solution—therefore to rust and corrosion—than copper-bearing steel and non-copper-bearing iron and steel. The above chart is based on the *Electromotive Force Series of Metals**, which is the commonly accepted scientific demonstration of the relative "nobility"—or resistance to solution—of metals.

*Indicates relative potential against normal Calomel Electrode KCL.Hg₂ Cl₂/Hg. at 25° C. Volts after 1 hour in 1% Sodium Chloride Electrolyte.



WHY YOU SHOULD

GUARDS YOUR REPUTATION...



● Toncan Iron offers a long record of proven success under severe service conditions. Made exclusively by Republic Steel Corporation, world's largest producer of alloy steels, Republic Toncan Iron is one of the oldest and best-known names in the building industry. It is a name which adequately protects the architect's reputation for good judgment in the selection of quality materials.

FABRICATES EASILY, ECONOMICALLY...

● Toncan Iron gives the opportunity to do a better, more economical job because Toncan is easier to work. Its galvanized coating does not peel off easily. Toncan Iron is ductile, flat, easily formed and welded. It is uniform, structurally and chemically, from sheet to sheet, bundle to bundle, carload to carload.

By specifying Toncan Iron you take an important step in avoiding inferior sheet metal work or delayed progress on your jobs. Sheet metal fabricators like to work Toncan Iron.

ON THE OCEAN FRONT at Daytona Beach, Florida, beautiful Surf & Sand Apartment Hotel is exposed to severely corrosive salt spray and air. Because of its corrosion-resistance under these extreme conditions, Toncan Copper Molybdenum Iron was used for gutters, downspouts and ducts. Architects: Ochert and Teare, Cleveland, Ohio.



SPECIFY TONCAN IRON!

COSTS YOUR CLIENTS LESS PER YEAR



Wherever resistance to rust and corrosion is important, Toncan Iron gives the greatest value per sheet metal dollar. It has outlasted competitive ferrous materials on downspouts and ducts, on roofs and on sides of buildings, along seaboards and swamps, on farms and factories—in fact, every place where the hazard of corrosion exists. Because it lasts longer, Toncan Iron *costs less per year!*

7500 LBS. of Toncan Sheets were used for roofing, gutters, etc., on the cabana at the fashionable Arrowhead Springs Hotel at Arrowhead Springs, California. The Architect was Paul Williams.



What you get When you specify "TONCAN IRON"



You are calling for the product famous as the uniformly rust-resistant sheet metal containing *twice as much copper* as competitive ferrous materials—a metal which helps to build your own reputation, which fabricators respect for its working qualities and from which your clients will experience the very best value for their money.

TWELVE TONS of Toncan Sheets were used in the heating and ventilating ducts of the General Electric office and warehouse building at Los Angeles, California. Architect: Albert C. Martin.





HOW MUCH MORE

In every sheet metal job certain costs—forming, shipping, applying the sheets—remain about the same whether you specify Toncan Iron or some other material. In fact, Toncan is so easy to work, so uniform in quality, that it often *lowers* the cost of forming and applying.

The PRICE of Toncan Iron for a given application is only a little higher than the price of other ferrous sheets commonly used for the same type of work.

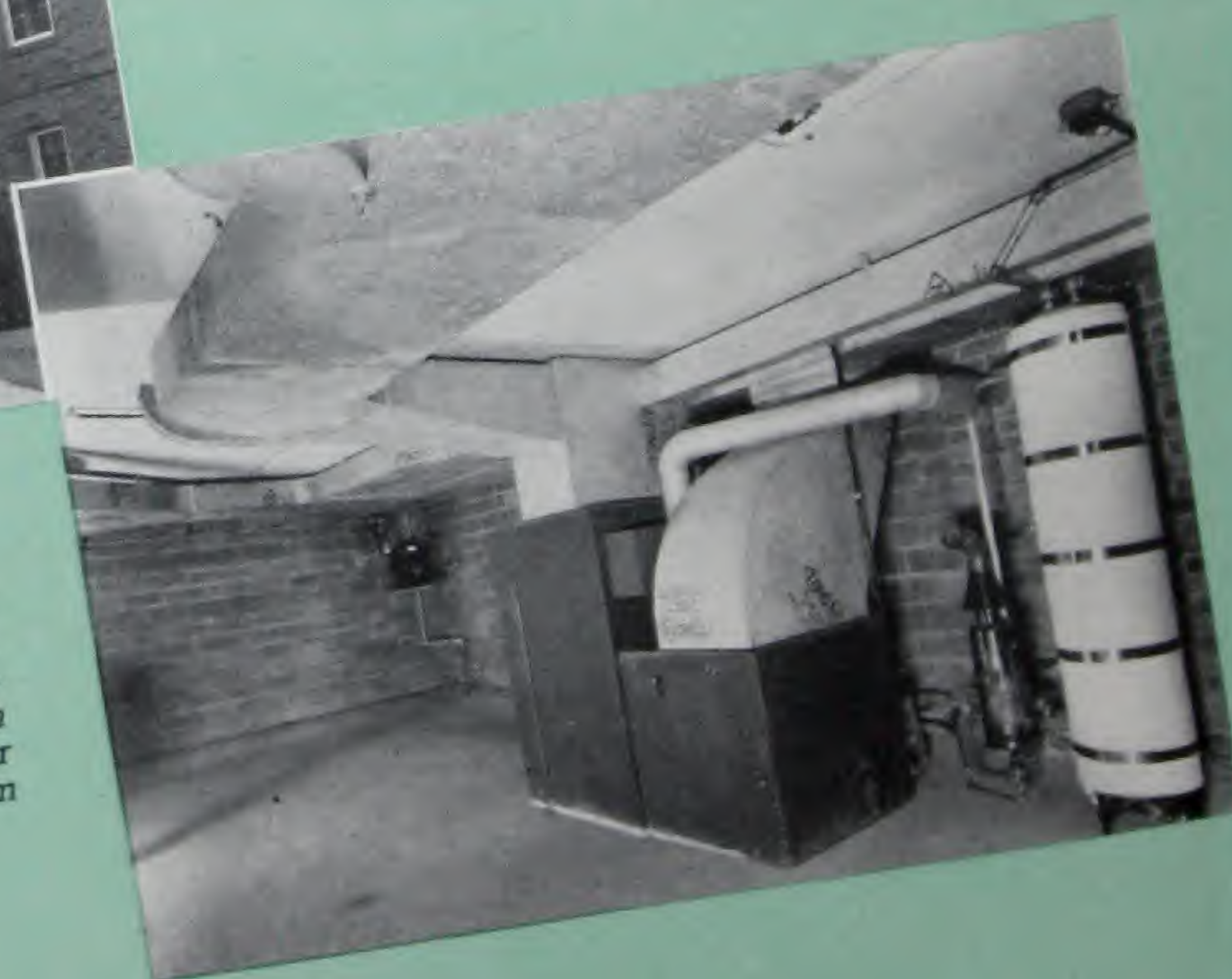
But the COST (price divided by years of service) is often much *less* than the cost of other “cheaper” materials!

Where long life, greater resistance to rust corrosion, and freedom from frequent expensive repairs and replacements are important—it COSTS LESS in the long run to use Republic Toncan Iron.



JUST A FEW DOLLARS extra gave the owner of this Cleveland, Ohio, home (left) the extra corrosion resistance and longer life of Toncan Iron. Toncan was used for all sheet metal work, including gutters, downspouts, air conditioning ducts, etc.

CLOSE-UP (right) of some of the Toncan Iron duct work in the Cleveland, Ohio, home shown above. Here, Toncan's workability as well as its corrosion resistance, made it the ideal material for low yearly cost. The architect was John W. Little.



DOES TONCAN IRON COST ?



THE SLIGHT extra cost of Toncan Iron for gutters and leaders on this Chestnut Hill, Mass., home will pay dividends in extra years of service. Architect: Eleanor Raymond.

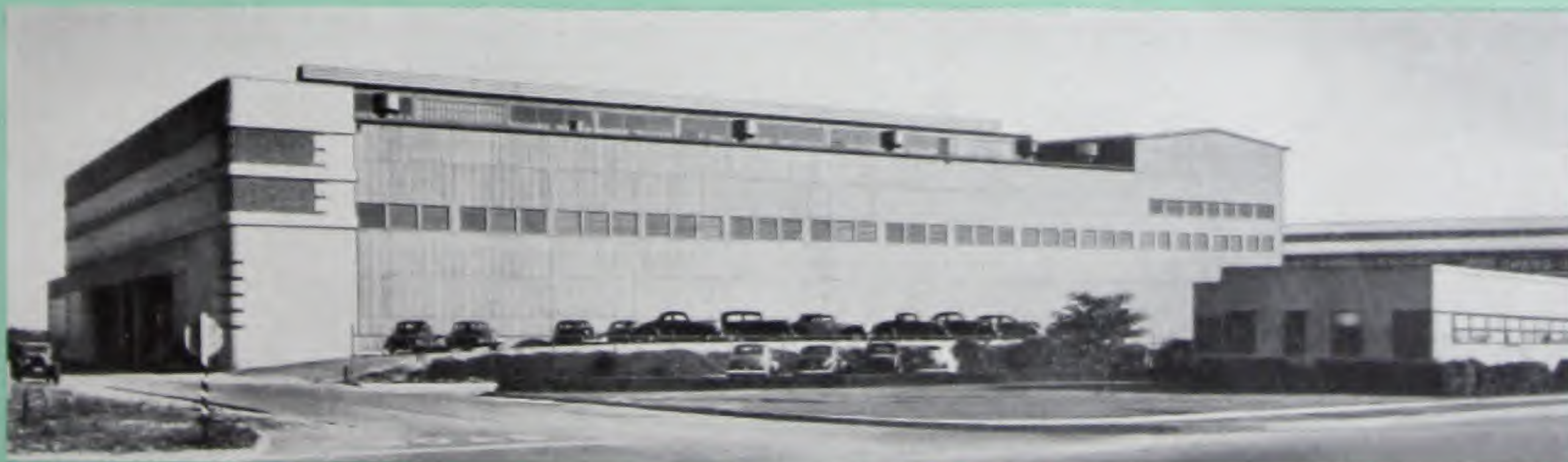


"TRILLIUM RUN," beautiful Lake Forest, Ill., residence of architect Jerome Robert Cerny. Here Toncan Iron is used on all decks, saddles, tops of bay windows, chimney caps and air conditioning ducts.



SMALL EXTRA cost of the 70 tons of Toncan Iron corrugated sheets used for siding and roofing on the factory (below) of Owens-Illinois Pacific Coast Company at Los Angeles was well justified. Note the fine condition of this building after ten years of use.

THE COST of labor was 86% of the total cost of installing the gutter on the "eyebrow" roof of this house (left). This cost will not be repeated soon because only 90c extra put Toncan Iron on the job.



TONCAN IRON SHEETS FOR RESIDENCES



HARMONIZING perfectly with its unusual setting, this roomy home in Bel-aire, Los Angeles, California, was designed by Paul Laszlo. Galvanized Toncan Iron, 26 gauge, was used throughout this outstanding building.



ANOTHER BEAUTIFUL HOME of distinction in Lake Forest, Illinois—for the ducts of which rust-resisting Toncan Iron was used exclusively. Architect: Jerome Robert Cerny. Mr. Cerny also specified Toncan Iron for 'Trillium Run', his own home.



THE BEAUTIFUL CORINTHIAN columns in front of this residence in Shreveport, La., were made from Toncan Iron. Architects: Jones, Roessle, Olschner and Weiner. Fabricator: H. H. Bain Sheet Metal Company.



ALL AIR CONDITIONING ducts and even the hood over the kitchen stove in this Nashville, Tennessee, home were made from Toncan Iron. Architects: Warfield and Keeble. Sheet Metal Contractors: T. L. Herbert and Sons Company.

TONCAN IRON SHEETS FOR INSTITUTIONS



A TOTAL of six thousand pounds of long-lasting Toncan Iron Sheets were used in constructing the ducts at Ahrens Trade School, Louisville, Kentucky. The Consulting Engineers on this job were Warren and Ronald.



TONCAN IRON Sheets were used in building beautiful Woodworth School at Dearborn, Michigan. The architect was C. R. Jensen. The greater corrosion resistance of Toncan Iron pays dividends in the extra years of life, fewer replacements.



APPROXIMATELY eight tons of Toncan Copper Molybdenum Iron Sheets were used for the ventilating ducts of beautiful Long Beach Junior College, Long Beach, California. This school was built in 1925. Architect: Jess Jones.



ABOUT 20 TONS of Toncan Iron have been applied on distinctive Old Dartmouth Hall at Dartmouth College, Hanover, N. H. The architect was Jens Friedrich Larson. W. H. Trumbull was the general contractor.

Toncan Iron Sheets for Heating and Air-Conditioning

★ In the selection of ferrous materials for air-conditioning systems, there is the ever-present problem of combating corrosion in (1) central station air-conditioning units and (2) ducts through which the conditioned air is carried to different parts of the building. Replacement of failed metal parts in air-conditioning installations is an extremely costly matter. Hence, insurance of maximum life for these parts is a fixed responsibility of the architect or engineer.

Toncan Iron has demonstrated its ability to prolong the life of air-conditioning equipment through its stubborn resistance to these corrosive conditions.

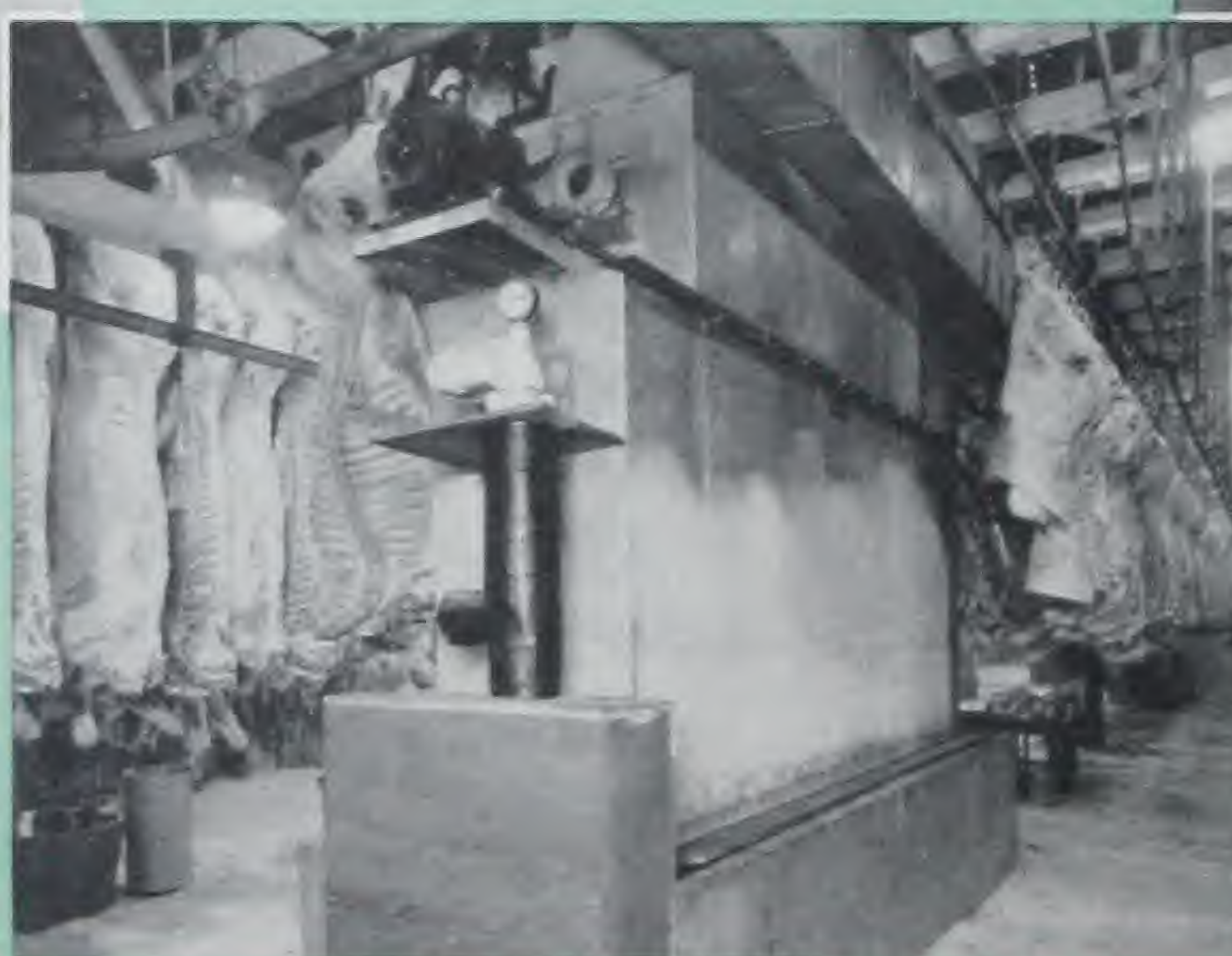


A VIEW of the Toncan Iron air conditioning ducts in a Wilmington, Delaware, office building. 7 carloads of Toncan Sheets and 4 of Toncan Pipe were used. Fabricator: W. F. Shinn Company.

HERE IS a close-up of the Toncan Iron fan housing and air washers at Woodworth School, Dearborn, Michigan. These were fabricated by the American Blower Company.



TONCAN IRON Sheets were used in the air-conditioning units (below) of Laclede Packing Company, St. Louis, Missouri. Fabricator: Midwest Piping and Supply Company. Engineers: R. H. Tait & Sons.



TWO CARLOADS of Toncan Iron Sheets were used for the duct work (below) at Virginia State Medical College, Richmond, Virginia. Architects: Baskervill & Son.

SHOWN below are Toncan Iron ducts in the building of the Associated Telephone Company, Santa Monica, Cal. Engineer and Architect: Maurice Sasso.



Toncan Iron Sheets for Factory Maintenance

★ The designer of industrial buildings must, of course, plan a structure capable of withstanding the ravages of time and the weather. But in addition, he must also provide protection against quick destruction by the extremely corrosive smoke and other factory by-products to which most industrial buildings are constantly exposed.

Toncan Iron is an expert alloy of highly refined open hearth iron, molybdenum, and twice as much copper as the best copper-bearing steel. It was created to resist corrosion. It gives your client longer service—at lower yearly cost!

OVER SIXTEEN years ago the soy bean processing plant (left) was roofed and sided with Toncan sheets, still in excellent condition. So Toncan was specified for the addition in the foreground.

SHEATHING of the tower of this grain elevator (right) at Buffalo, New York, was made from corrosion-resisting Toncan Iron Sheets. Fabricator: Schmahl Sheet Metal Works.

VENTILATORS and skylights on this garage at Greensboro, North Carolina, are assured a long life. Made from Toncan Iron in 1928, they are still in good condition. Architect: J. J. Sawyer.

MANY YEARS of satisfactory service on other buildings convinced Ohio Forge and Machine Corporation that Toncan Iron was the metal to use throughout their plant. The drop shop building is shown below.

TONCAN IRON STANDS UP under the corrosive conditions in industrial centers such as Cleveland, Ohio. The Toncan Iron roof of The Steel Improvement and Forge Company was installed in 1927.



How to Specify TONCAN IRON SHEETS

● Toncan Iron Sheets are stocked by jobbers in all large cities. Be sure to specify: "All sheet metal work shall be rust-resisting Toncan Copper Molybdenum Iron manufactured by Republic Steel Corporation." In cases where public institutions do not use trade-names in specifications, Toncan Iron Sheets may be specified as: "Alloyed iron sheets of open hearth iron, copper and molybdenum produced by the basic open hearth process, containing no less than .40 per cent copper and .05 per cent molybdenum."

For your protection, every Toncan Iron galvanized sheet is stenciled at approximately two-foot intervals with the Toncan Iron trademark in green. Smaller formed products are die stamped with the trade-mark and maker's name. The gage also is clearly shown.

Look for the green Toncan Iron trade-mark—it's your assurance of longer sheet life, easier working quality, and greater economy.

Forms and Finishes

● Hot-Rolled, Galvanized, Galvannealed, Terne Coated Flat Sheets, in all the usual gages and various popular forms of roofing, galvanized or painted, are available. Roofing may be had in 1¼, 2, 2½ and 3 in. corrugated, Triple Drain, in Pressed Standing Seam; in 2, 3, 4, 5 and 6 V-Crimp; Pressed Standing Seam; Double Cross Lock Roll Roofing; Roll and Cap Roofing; Weatherboard Siding; Cross Corrugated; and in Plain and Rock Face Brick and Stone Siding.

SIZES AND GAGES

Commercial Galvanized and Special Tight Coat, as well as formed roofing products. 12 to 28 U. S. Gage inclusive. Width range, 24 in. to 48 in. Length, 60 in. to a maximum of 144 in.

Hot-Rolled Sheets—8 to 26 U. S. Gage, inclusive. Width range, 12½ in. to 60 in. Length, 30 in. to a maximum of 192 in.

Heavy Cold-Rolled and Light Cold-Rolled—7 to 24 U. S. Gage, inclusive. Width range 24 in. to 63 in. Length, 60 in. to a maximum of 120 in.

Long Ternes—14 to 28 U. S. Gage, inclusive. Width range, 24 in. to 49 in. Length, 60 in. to a maximum of 144 in.

Toncan Iron Oven Lining and Toncan Iron Galvannealed—Gages 16 to 28, inclusive. Width up to 54 in. Lengths to 144 in.

Corrugated Roofing and Siding—

(a) Galvanized—Present standard widths and corrugations. In all lengths, 5 ft. 0 in. to 12 ft. 0 in. in 26 gage and heavier, even gages.

(b) Painted—Present standard widths and corrugations. In all lengths, 5 ft. 0 in. to 12 ft. 0 in. in 26 gage and heavier, even gages.

ROLLING LIMITS TONCAN IRON SHEETS

This table indicates the rolling limits of Toncan Iron Sheets in hot-rolled, galvanized, heavy hot-rolled annealed and special finishes, with the exception that hot-rolled, annealed Toncan Iron Sheets are not made lighter than 26 gage, while galvanized sheets are not supplied in greater length than 144 in. nor wider than 48 in. Uncoated sheets can be furnished in widths and lengths greatly in excess of those shown here. Details upon application.

GAGE	LENGTH IN INCHES																			
Width	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	48"	50"	52"	54"	56"	58"	60"	
No. 28	144	144	144	144	144	144	144	144	120	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 27	144	144	144	144	144	144	144	144	120	120	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 26	144	144	144	144	144	144	144	144	144	144	120	120	120	.....	.....	.....	.....	.....	.....
Nos. 25 and 24	144	144	144	144	144	144	144	144	144	144	144	120	120	.....	.....	.....	.....	.....	.....
No. 23	144	144	144	144	144	144	144	144	144	144	144	144	120	.....	.....	.....	.....	.....	.....
Nos. 22 and 20	144	144	144	144	144	144	144	144	144	144	144	144	144	.....	.....	.....	.....	.....	.....
No. 18 & heavier	144	144	144	144	144	144	144	144	144	144	144	144	144	120	120	120	120	120	120	

TONCAN IRON Plates and Strip

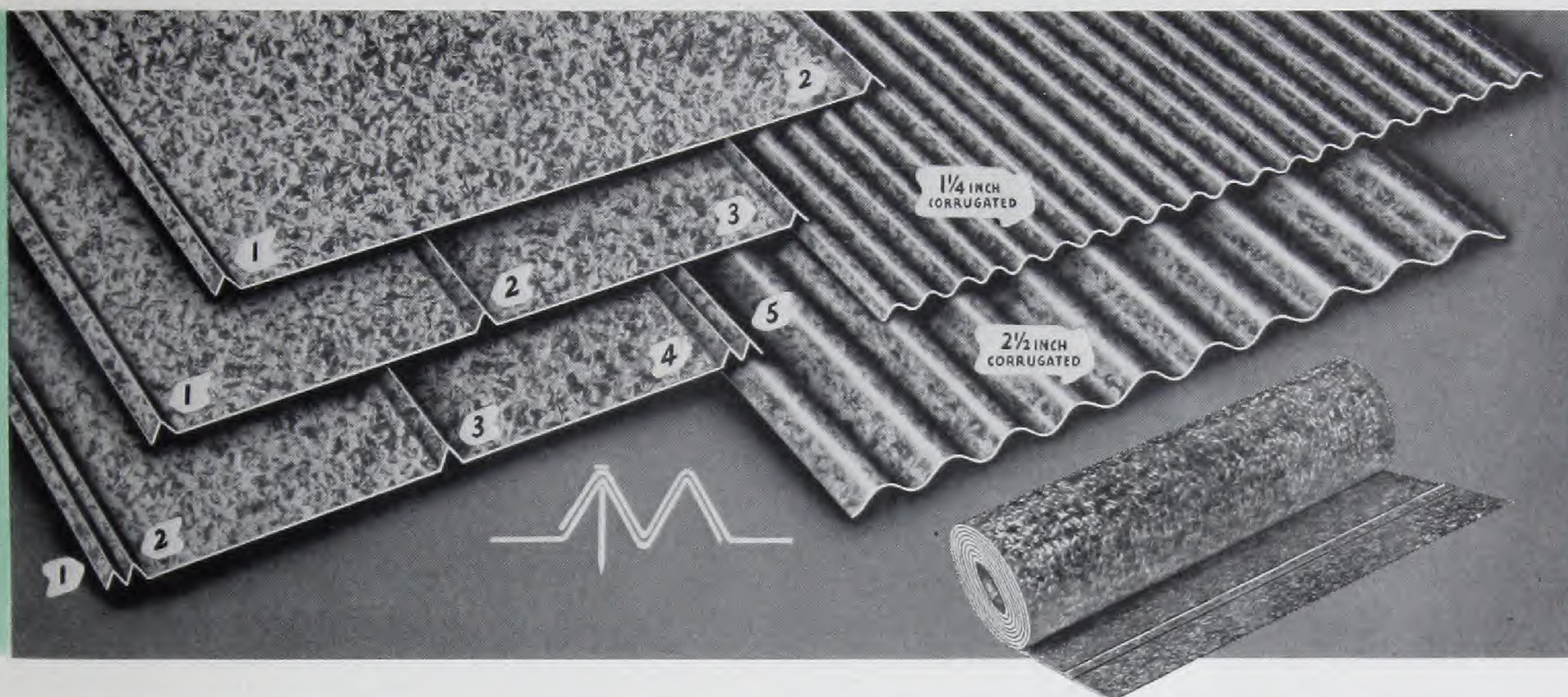
● **Rust-Resisting Toncan Iron Plates** are made in thicknesses ranging from No. 10 BWG to 2 in. Sizes range from 24 to 150 in. in width and from 190 to 640 in. in length, depending upon thickness. Hot-rolled plates are also available in Steel, Republic Double Strength Steel and Enduro Stainless Steel.

Hot-Rolled Toncan Iron Strip is available in widths from 3½ in. to 36 in. Through special arrangements, it can be made in widths narrower than 3½ in., in which case the lightest limit is 16 gage.

The lightest gage in which cold-rolled Toncan Iron Strip is offered is 22 gage. All widths available.

MORE COMPLETE DATA ABOUT TONCAN IRON SHEETS, PLATES AND STRIP MAY BE FOUND IN SWEET'S

REPUBLIC FORMED ROOFING PRODUCTS ★



● **V-Crimped Roofing:** Reasonable in cost, it can be applied over close sheathing to strips spaced 4 or 5 inches apart, or over old shingles. The 3 V-crimped makes a stiffer sheet than the standard, while 5 V-crimped is still stronger. All three styles supplied in lengths of 5, 6, 7, 8, 9, 10, 11 and 12 ft., and in gages 24 and lighter. Actual covering width, 24 inches.

Corrugated Sheets: Provide light weight, great lineal rigidity, plus fire protection in roofing and siding for industrial buildings, warehouses, mine buildings, and other structures in the vicinity of railroads. Also

ideal for barns, garages and a wide variety of other buildings. The 1 1/4-in. style supplied in gages 20 and lighter; 2, 2 1/2 and 3-in. styles in gages 10 and lighter. Both styles 26 or 27 1/2 in. wide; lengths, 5, 6, 7, 8, 9, 10, 11 and 12 ft.

Roll Roofing: Especially useful with slight roof pitch and for wide areas. Cross seams double locked. 50 lineal feet in each roll. Covering width 24 in. Gages 26 and 28. Also available in Roll and Cap (with caps and cleats) and Self-capping Roll Roofing. No nails driven through material when applied.

Republic's New Triple-Drain Roofing

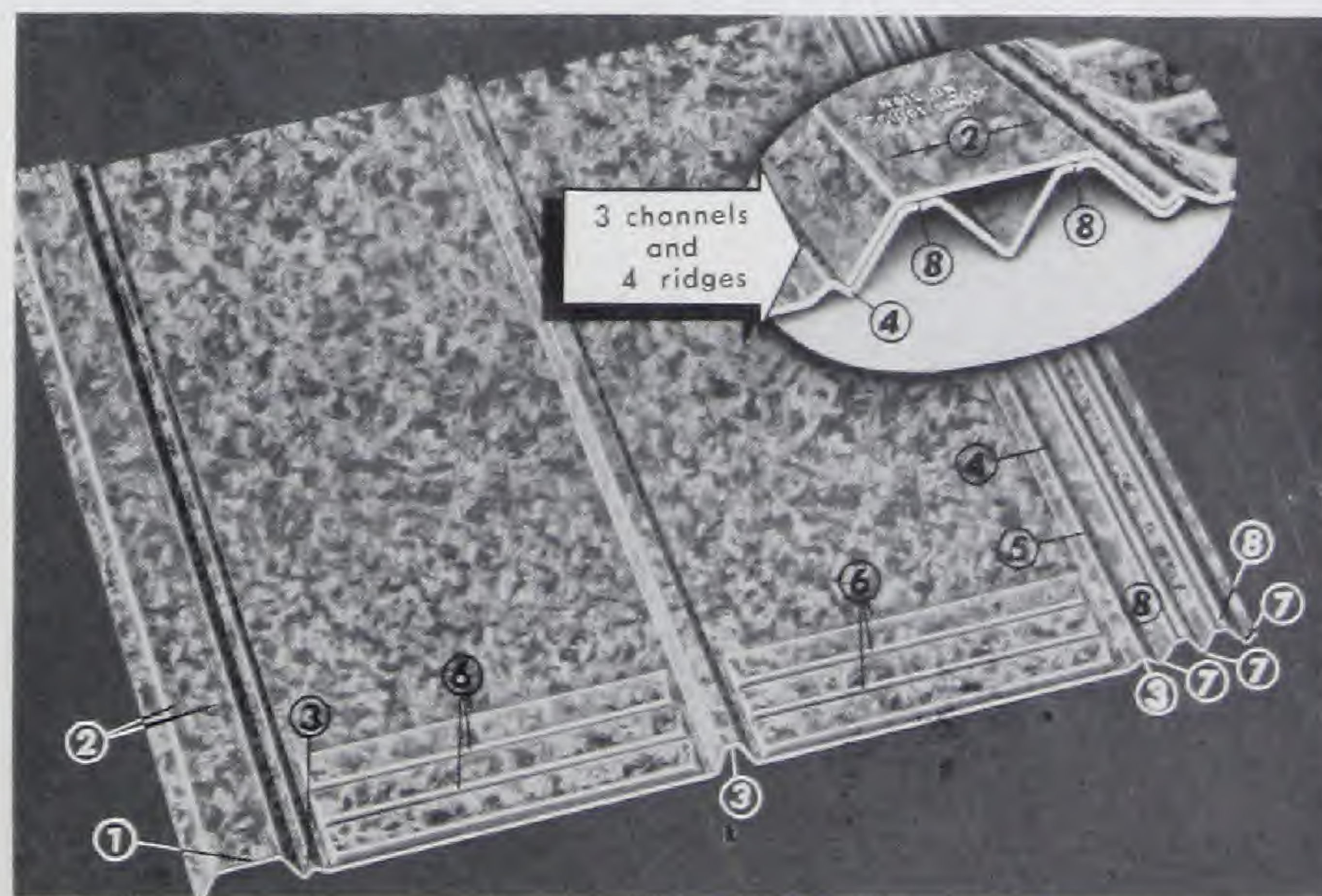
Makes leaks impossible. Not one, not two, but actually *three* channels! Water must climb 4 "ridges" and 3 "valleys."

Triple-Drain gives you these plus features:

- | | |
|---|---|
| 1. No water or dust, no chemical reaction on flat top. | 6. Rib stiffeners - no wind flapping - prevents syphoning. |
| 2. Fool-proof nailing guide. | 7. Steep "V" channels - water runs off faster - keeps channels clean - keeps dust or chaff from accumulating. |
| 3. Center crimp for rigidity. | 8. Nail indentation - non-slip nail guide. |
| 4. Guide for top lap insures snug fit. | |
| 5. Wind deflector - no wind buckling or capillary action. | |

Made of prime sheets resquared before forming—no seconds—perfectly fabricated. Full weight galvanizing. Rolling bends—no sharp bends to cause galvanizing to chip or crack. For roofs of 1/4 pitch or more.

EASY TO APPLY—WATERPROOF—FIREPROOF—EXCELLENT PROTECTION AGAINST LIGHTNING WHEN PROPERLY GROUNDED



FOR LITERATURE DESCRIBING THESE AND OTHER REPUBLIC FORMED ROOFING PRODUCTS...WRITE REPUBLIC STEEL CORPORATION • CLEVELAND, OHIO

REPUBLIC ELECTRO PAINTLOK SHEETS



● These zinc-coated sheets take paint, enamel and lacquer easily—and *grasp* it with long-time adherence. Coated electrically, they don't flake or powder in the dies, don't crack, don't peel.

You can bend Electro Paintlok Sheets, stamp them, draw them and paint them—with outstanding results. They are tailor-made to meet modern requirements. Whether you choose to paint, enamel or lacquer Electro Paintlok Sheets, their pure zinc coating, applied by Republic's electric process, provides a degree of mechanical adhesion never before possible.

BASE METALS AVAILABLE

Republic Electro Paintlok Sheets are available in plain open hearth steel, U-Loy copper-bearing steel and in rust-resisting Toncan Copper Molybdenum Iron, exclusive product of Republic Steel Corporation.

The standard surface finish of these metals will meet normal production requirements of most products. For example, signs, washing machine lids and refrigerator parts are only three of the many being made successfully without an extra treatment or burnished finish. Arrangements can be made, however, for additional surface preparation when circumstances make this advisable.

All grades of Republic Electro Paintlok Sheets can be supplied stretcher leveled and, if ordered, resquared where extra flatness is required.

GAGES AND SIZES

Electro Paintlok Sheets are available in gages 14 to 24 inclusive. Widths range up to 60 inches, in gages 14 to 20 inclusive, and to 53 inches in gages 21 to 24 inclusive. These sheets are offered in lengths up to 144 inches. If your requirements are not met by these ranges, let us know. We will be glad to discuss your problem.



TONCAN IRON PIPE



● The same corrosion-resistance which has enabled Toncan Iron Sheets to set so many service records is also available in Toncan Iron Pipe. Wherever the going is tough, where corrosive conditions require pipe with maximum ability to combat corrosion, Toncan Iron Pipe is a safe specification. Complies with Federal Specification WW-P-403a, Type III.

Check these advantages:

1. **Toncan Iron Pipe has high corrosion-resistance.** This chemically and structurally uniform alloy of open hearth iron, copper and molybdenum in the proper proportions has high nobility—a high

resistance to dissolution in liquids. It also possesses a quality of uniform resistance to solution, thus minimizing chances for pitting and premature failure.

2. **It is free from mill scale.** Mill scale in direct contact with iron and a current-carrying solution forms galvanic cells which promote rapid selective corrosion with resultant premature pitting type failure. Freedom from mill scale eliminates possible failure from this cause.
3. **It has high ductility.** Bending and forming operations can be performed quickly and easily. This means lower fabrication costs.
4. **It can be rapidly and cleanly threaded.** This means tight joints—lower threading costs.
5. **It is manufactured by the most modern and improved processes.** Sizes $\frac{1}{4}$ to $1\frac{1}{2}$ -inch are made by the new and improved continuous butt weld process. Sizes 2-inch to 16-inch are made by Republic's perfected electric resistance weld process.
6. **Toncan Iron Welding Fittings and Welding Rod are available.** Toncan Iron Pipe is available in Standard, Extra Heavy and Double Extra Heavy Weights.

GET COMPLETE INFORMATION ABOUT ELECTRO PAINTLOK SHEETS AND TONCAN IRON PIPE BY WRITING TO REPUBLIC STEEL CORPORATION, CLEVELAND, OHIO

Where Republic Enduro Stainless Steel Can Be Used in Architecture

● A list of all possible applications for Enduro in architecture would be a list of practically all uses to which any metal can be put in any building. Palatial office building and modest cottage, huge industrial plant and small store—all can profitably employ Enduro Stainless Steel for utility, beauty, or both.

Enduro is the family name of a complete series of corrosion and heat-resisting steels manufactured by Republic—world's largest maker of alloy and stainless steels.

Enduro resists corrosion better than any other ferrous material. Properly selected and applied, it is rust-proof and will not tarnish when exposed to the atmosphere. That's why it is called "stainless steel." Silvery-white Enduro is the same beautiful, strong metal all the way through.

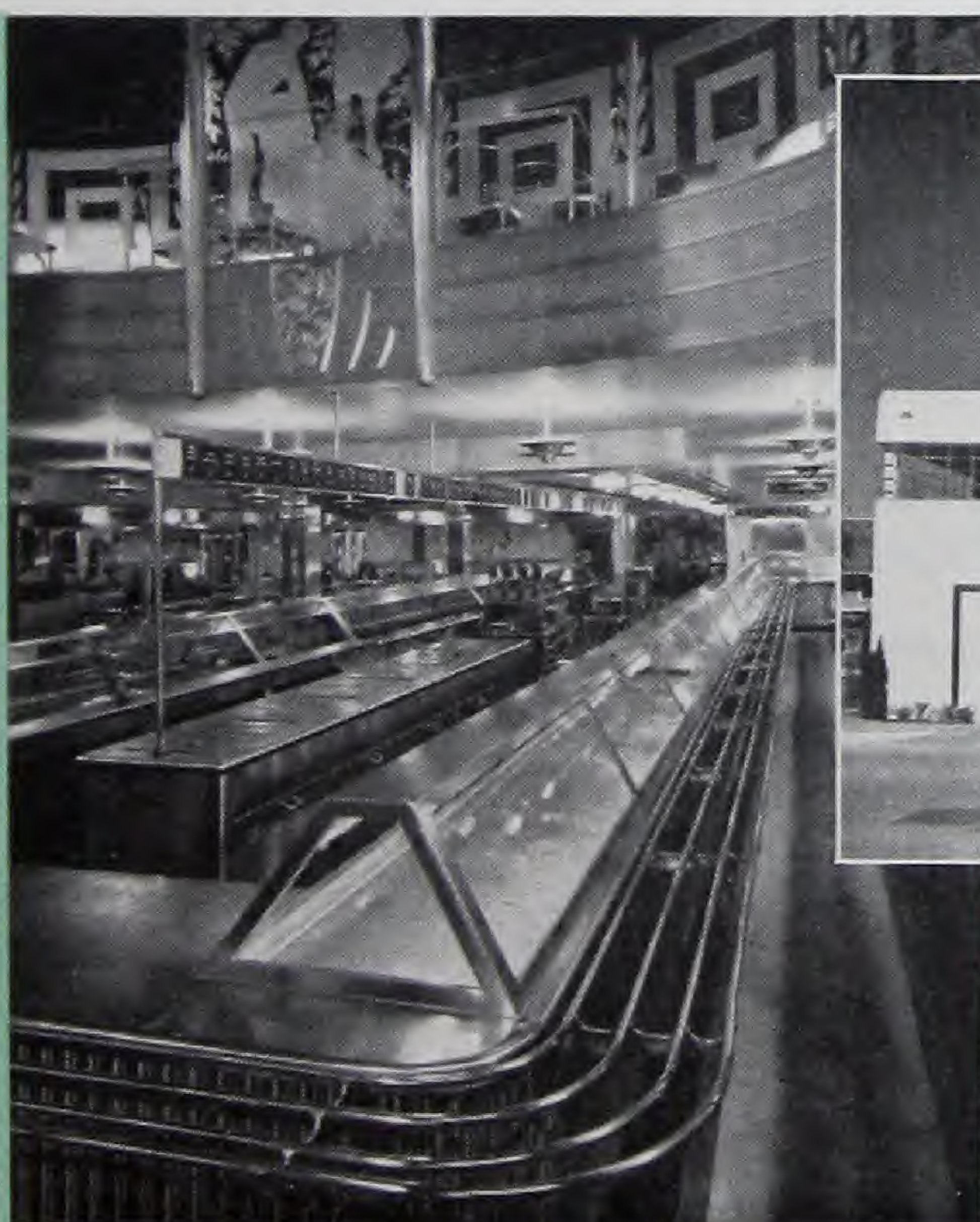
It is easily cleaned—and looks as sanitary as it actually is. Stronger than ordinary steel, Enduro is excellent for applications where

both high strength and high corrosion-resistance are necessary. It resists scaling (oxidation) at high temperature. It is readily workable and can be fabricated by the usual commercial methods.

An important architectural advantage of Enduro is the ease with which it can be combined with other materials. Its gleaming, silvery lustre blends perfectly with glass, plastics, non-ferrous metals, wood, brick, marble, stone, concrete, etc.

Distinctive combinations of different surface finishes of Enduro are easily obtained. Or, it may be etched and filled in with color, either in solid tones or in air-brush effects.

Enduro has been used for decorative effects on some of the country's finest buildings. Yet, it is equally suitable for such practical purposes as heater smoke pipes and conductor pipes, where it lasts many times longer than ordinary pipe with resultant savings and freedom from trouble.



LOUVRE heads, jambs, sills and frames are Enduro at Waco Coca Cola Bottling Co., Waco, Texas. Architect: R. V. Derrah. ENDURO is used on railings, banisters, food cases, balconies and trim at Forum Cafeteria (left), Chicago, Ill. Architects: Loewenberg and Loewenberg.

WRITE TO REPUBLIC STEEL CORPORATION, CLEVELAND, OHIO, FOR ALL THE FACTS ABOUT ENDURO STAINLESS STEEL

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Canadian Representative—Toronto, Ontario

Export Department—New York, N. Y. Cable Address—"TONCAN"

REPUBLIC STEEL CORPORATION
GENERAL OFFICES: CLEVELAND, OHIO

